

The Clipper Ship *Snow Squall* Translating a Dream Into Reality

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In March 1982 two men returned to New England from the South Atlantic Ocean with a dream. Nicholas Dean and Dr. Fred Yalouris had journeyed to Port Stanley in the Falkland Islands to examine the remains of the clipper ship *Snow Squall*. Dean originally had been directed to the site three years earlier by a Falkland Islands historian; he returned with Yalouris, a Harvard archeologist, to determine the feasibility of recovering a portion of the ship's hull for conservation and exhibition on her native shore. As they photographed and took preliminary measurements of the hull, the pair decided that the clipper's intact lower bow section could be saved, although the remainder of the hull was inaccessible.

Arriving home a scant two weeks before the outbreak of the Falkland Islands War, the two men sought the means by which to undertake a series of archeological expeditions to excavate and retrieve *Snow Squall*'s available remains to South Portland, ME, the site of her con-

struction. They assembled a team of archeologists, historians, engineers, and other adventurous individuals, obtaining the sponsorship of Harvard University's Peabody Museum of Archaeology and Ethnology and the loan or gift of the equipment and supplies necessary to begin documentation of this historic vessel.

Five years and four expeditions later, the *Snow Squall* project crew brought the clipper's bow back into Portland harbor as deck cargo on the Danish freighter *Asifi*. Nick Dean had spent the month-long voyage from Port Stanley cleaning the last of the harbor mud from the hull's interior and spraying its waterlogged timbers with seawater to keep them from drying out. On March 16, 1987, a crane gently lowered the bow to its new home, the Spring Point Museum. This young local history museum assumed sponsorship of the project, accepting the challenge of translating their dream into reality—documenting, conserving, and interpreting this large 19th-century artifact.

What is the significance of this object? The clipper ship *Snow Squall* was the third of four vessels built by Cornelius Butler at his yard on Turner's Island in Cape Elizabeth (now South Portland), ME. Launched into the Fore River on July 14, 1851, for 13 years flying the house flag of New York merchant Charles R. Green in the Pacific and South American trades, *Snow Squall* carried general cargoes out and tea, spices and coffee home. On her final voyage, bound from New York to San Francisco in 1864, she ran aground in the Straits of LeMaire near Cape Horn, and was sailed in sinking condition to Port Stanley, where she was condemned and abandoned after

transhipment of her cargo and sale of her gear.

Snow Squall lay as a hulk at the Falkland Islands Company jetty for over a century, damaged both by natural causes and human activity. Photographs taken ca. 1880 reveal wood stripped from her upper hull for use as building material.

Storms and rot caused further damage, tons of sandstone jetty blocks shattered and smothered her midsection, and a sinking barge crushed her stern. By the mid-1980s, the only intact accessible remains of this ship comprised her bow, from the keel up to 'tweendeck level.

The four Peabody Museum expeditions accomplished preliminary documentation of *Snow Squall*'s bow and recovered all above-water structural mem-



Snow Squall's bow in situ at the Falkland Islands Company Jetty in Port Stanley, 1982. Photo by Nicholas Dean.

bers. The final Spring Point Museum expedition in late 1986-early 1987 retrieved the bow's 36'- long underwater section for study, treatment and interpretation at the new museum, two miles from the vessel's Turner's Island launch site.

Snow Squall's bow survives today as the sole remaining example of the hundreds of American-built clipper ships which made record-setting voyages carrying goods and passengers to and from Gold Rush-era

California, Australia, and the Far East. The clippers were very narrow in proportion to their length, with sharp,

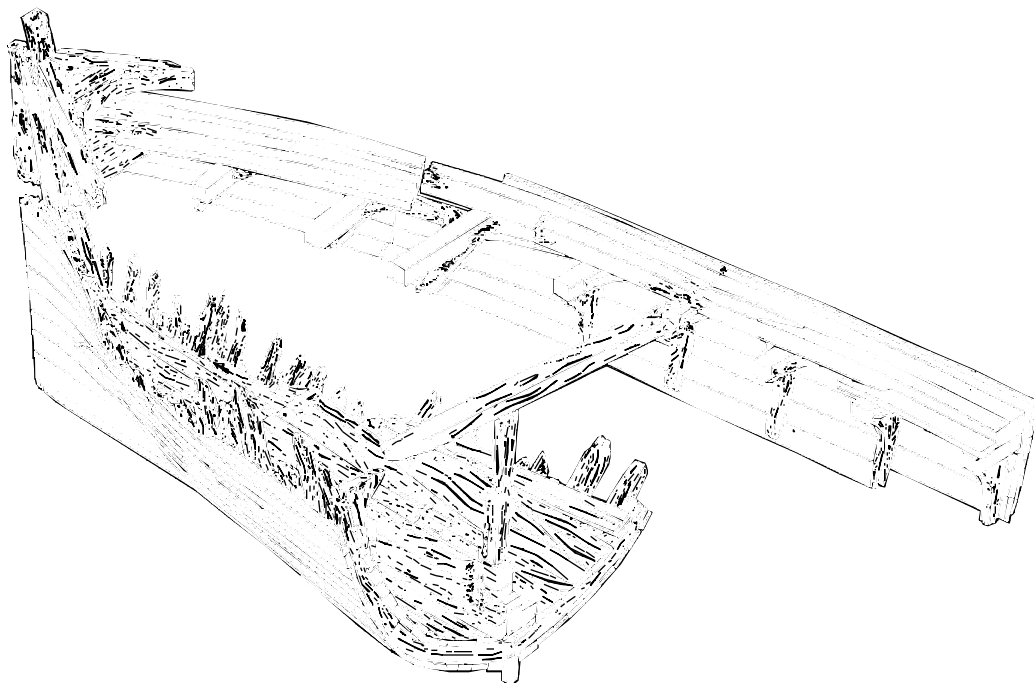
hollow bows; they were square-rigged, typically with an enormous spread of canvas. Vessels of this type developed in the 1840s, designed for speed rather than large cargo capacity in a boom time of high freight rates. By the late 1850s, economic conditions favored slower ships of greater cargo capacity and smaller crews, so clipper construction was abandoned.

The romance of the clipper ship era remains in the public mind, yet little primary evidence survives to disclose details regarding American clipper design and construction practices. *Snow Squall's* bow section thus represents a unique resource for both scholars and the general public.

The *Snow Squall* Archeological Project has been a labor of love from its start. The entire crew which undertook the Falklands expeditions did so without pay, in time borrowed from their regular jobs. More than a hundred individuals who now work in the archeological, conservation, and education efforts under the direction of the Museum's small professional staff carry on that strong tradition of volunteer service. The *Snow Squall* project nonetheless had to wait five years for an opportunity to assemble a qualified team for a period long enough to fully document the shape and construction details of the clipper's bow.

That opportunity came with the call for applications for institutional sponsorship of the first Sally Kress Tompkins Maritime Recording Internship, named in honor of the late Deputy Chief of the Historic American Buildings Survey/Historic American Engineering Record who initiated the HAER maritime documentation program. The Council of American Maritime Museums awarded the *Snow Squall* project the intern's services, and the Council and HAER granted the museum funding for the intern's stipend.

As the world's only surviving example of an American-built clipper, *Snow Squall's* bow was of interest to HAER as an historic object which was considered a



Axonometric drawing of *Snow Squall's* hull shows the distinctive bow profile of a clipper ship. Delineated by Karl Bodensiek, 1992, HAER.

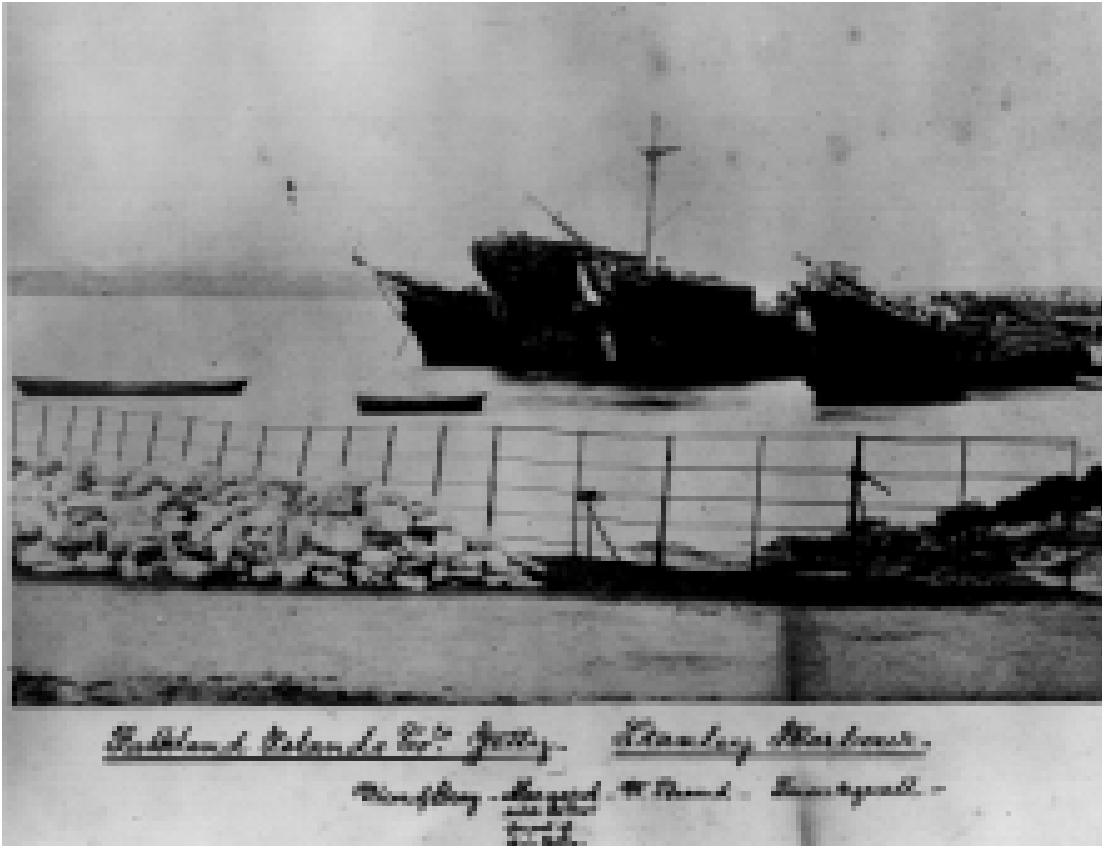
significant technological resource. HAER Maritime Project Leader Robbyn Jackson and I therefore worked out an agreement whereby HAER would provide the intern, an architect supervisor, and administrative support for a 12-week field season. On June 8, 1992, maritime intern Karl Bodensiek and architect Dale Waldron, HAER documentation project veterans, joined us for the summer.

The museum's conservator, Molly Horvath, served as liaison between the institution and the field team, providing advice and tools and locating hard-to-find ship's timbers, literally "missing links" in the documentation effort. As *Snow Squall* project historian/photographer, Nick Dean supplied the team with black-and-white prints of the bow's excavation in progress, and provided invaluable information on details of the vessel's construction. He is preparing the written historical report to augment the drawings, as well as shooting the large-format formal photographs of the hull. The final member of the team, *Snow Squall* project director Dr. David Switzer, had assumed project leadership from Fred Yalouris following the recovery of the bow; he furnished archeological expertise, and, with Nick, functioned as the project's "institutional memory."

The recording team overcame several practical difficulties in documenting the bow's intact lower section, which lies with a 26° list to port (tilt to the left side) with a downhill run of the keel as it goes aft. The team therefore adopted measurement strategies and techniques which did not require plumb and level conditions and allowed for the lack of straight lines and square corners, scarce commodities on wooden sailing vessels.

Bodensiek and Waldron, with assistance from the Museum's personnel, first "lifted the lines" of the bow, documenting the curvature of the hull's exterior at a series of stations running athwartships (perpendicular to

(*Snow Squall*—continued on page 26)



"Falkland Islands Co.'s Jetty, Stanley Harbor." *Snow Squall* is the vessel on the right. This photo, taken ca. 1880, shows salvaged planking piled on the clipper's deck beams, and contains the only known image of *Snow Squall*'s figurehead. Courtesy J. Porter Shaw Library, San Francisco Maritime National Historical Park.

(*Snow Squall*—continued from page 25)

the ship's centerline). They then developed a simple, yet highly accurate, system for recording measurements of the hull's interior area in the same planes as the stations used to measure the exterior. Despite the time-consuming process of developing measurement techniques unique to this project, Bodensiek and Waldron each finished the summer having completed five inked Mylar



Snow Squall project director David Switzer, maritime intern Karl Bodensiek, and HAER Architect Dale Waldron (from left) attach station lines to the bow section of the clipper ship in preparation for measurement of the hull's starboard side curvature. Photo by Molly Horvath, 1992.

sheets of drawings detailing the hull's design and construction. These drawings currently are under review in Washington, prior to final inking of annotations. When finalized, they will be deposited in the HAER Collection at the Library of Congress.

The Clipper Ship *Snow Squall* Bow Recording Project received major funding from the Davis Family Foundation, the Joan Whitney and Charles Shipman Payson Charitable Foundation, and the Maine State Archives' Odiorne Archeological Grant Fund. Southern Maine Technical College, on whose campus the museum lies, provided drafting tables and much-needed additional work space for the recording team.

The documentation of the design and construction of *Snow Squall*'s bow brings Nick Dean's and Fred Yalouris's 10-year dream closer to realization. The information derived from the project will facilitate the museum's ongoing conservation of the vessel, and serve as the basis for reconstruction drawings of the entire hull and the eventual reassembly of the conserved bow section. The finished drawings will prove of great interest in August of 1993, when the museum will host the Fifth Triennial Meeting of the International Council of Museums' Wet Organic Archaeological Materials Group. This will be the first meeting in the United States for this organization of over 100 conservators and scientists from 17 nations.

The museum is, at this writing, planning a capital campaign to fund the construction of a new wing to better serve the long term conservation and exhibition needs of *Snow Squall*'s bow.

Additional information on the *Snow Squall* project may be obtained by calling the Spring Point Museum at 207-799-6337.

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